DFN1006-2L ESD 静电保护二极管

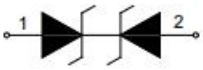
■Features 特点

Ultra-low capacitance ESD Protection 极低电容静电保护
- ±8kV Contact Discharge 接触放电
- ±15kV Air Discharge 空气放电

■Applications 应用

HDMA 高清数字多媒体
SIM Ports and Ethernet 用户识别和以太网
USB&ATM Interface 移动 U 盘及自动柜员机接口

■Internal Schematic Diagram 内部结构



■Absolute Maximum Ratings 最大额定值

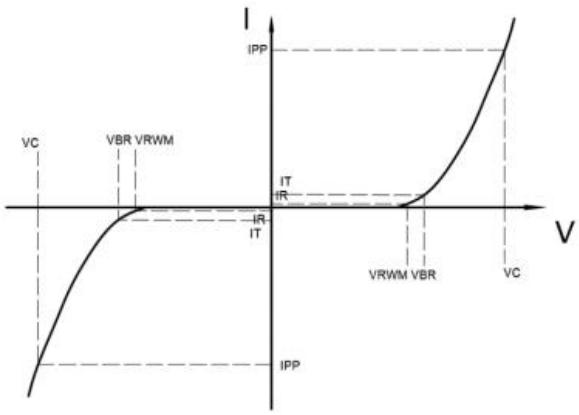
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
ESD (IEC61000-4-2 contact discharge) @25℃接触放电	V_{ESD}	±8	KV
ESD (IEC61000-4-2 air discharge) @25℃ 空气放电	V_{ESD}	±15	KV
Lead Temperature 管脚温度	T_L	260	℃
Lead Solder Time 管脚焊接时间	T_L	10	S
Operating Temperature 工作温度	T_{op}	-40~85	℃
Junction Temperature 结温	T_J	125	℃
Storage Temperature 储存温度	T_{stg}	-55~150	℃

■Electrical Characteristics 电特性

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃)

Characteristic Parameters 特性参数	Symbol 符号	Min 最小值	Typ 典型值	Max 最大值	Unit 单位	Condition 条件
Reverse Stand-off Voltage 反向工作电压	V_{RWM}			5	V	
Trigger Voltage 触发电压	V_T		450		V	8KV contact discharge
Clamping Voltage 钳位电压	V_C		40		V	8KV contact discharge
Reverse Leakage Current 反向漏电流	I_R			10	nA	V_{RWM}=5V
Diode Capacitance 二极管电容	C_D		0.05		pF	V_R=0V,f=1MHz

Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
I_F	Forward Current
V_F	Forward Voltage @ I_F



■Typical Characteristic Curve 典型特性曲线

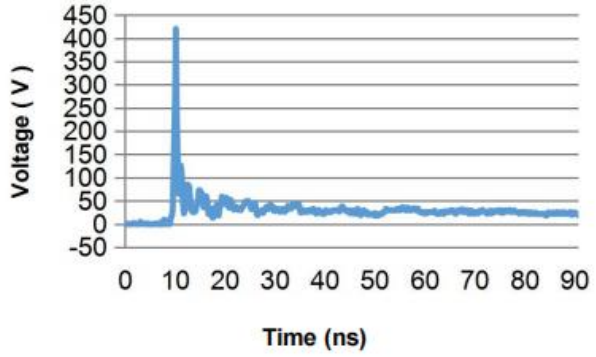


Fig.1 Typical ESD Response
（IEC 61000-4-2, 8kV contact discharge）

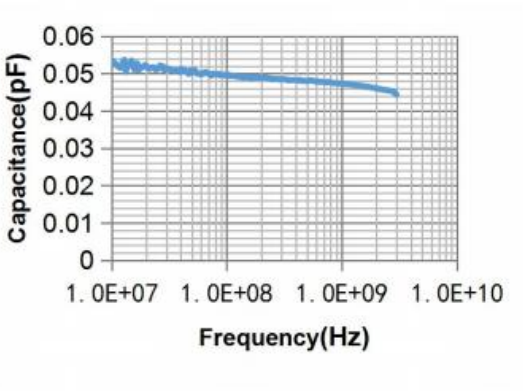


Fig.2 Typical Device Capacitance VS. Frequency

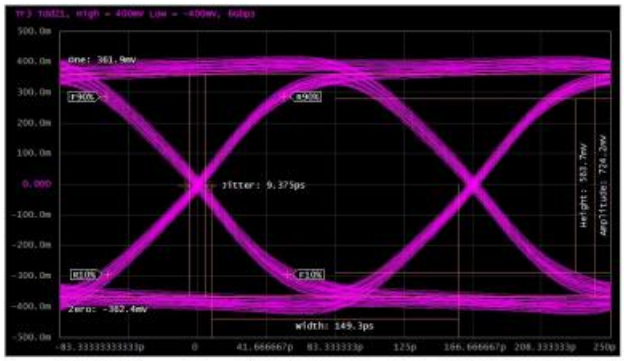
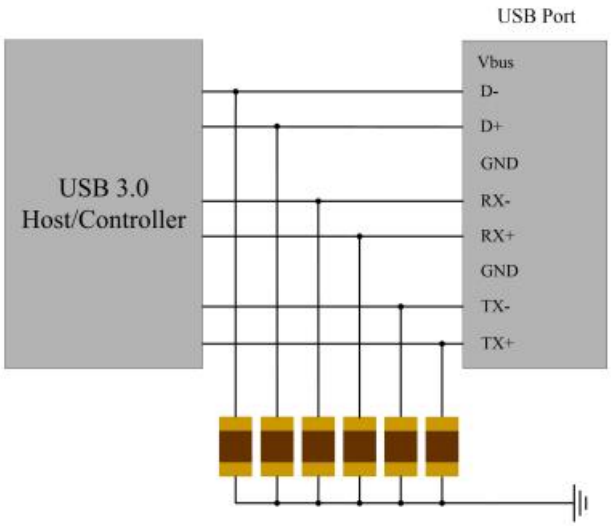
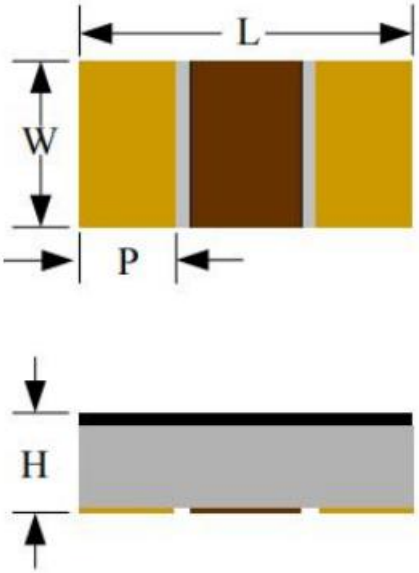


Fig.3 HDMI 2.0 Mask at 6.0 Gbps

■Typical Applications 典型应用



■ Dimension 外形封装尺寸



Dimension	Unit: Millimeters	
	Min.	Max.
L	0.90	1.10
W	0.42	0.62
p	0.15	0.35
H	0.25	0.45